

<b>Office Action Summary</b>	<b>Application No.</b> 10/755,086	<b>Applicant(s)</b> LAWRENCE, DAVID S.	
	<b>Examiner</b> CHIH-MIN KAM	<b>Art Unit</b> 1656	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 October 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) See Continuation Sheet is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) See Continuation Sheet is/are allowed.
- 6) ☒ Claim(s) 49,60-66,80,88,89,93,123,127-131,134,137-141,148,153 and 154 is/are rejected.
- 7) ☒ Claim(s) 57 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |  |
|---|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. <u>10100109</u> .                           |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application  |
| Paper No(s)/Mail Date _____.  | 6) <input type="checkbox"/> Other: _____.                          |

Continuation of Disposition of Claims: Claims pending in the application are 49,56-71,73-80,83,84,86-93,96-102,122,123,127-131,133,134,137-143 and 146-154.

Continuation of Disposition of Claims: Claims allowed are 56,58,59,67-71,73-79,83,84,86,87,90-92,96-102,122,133,142,143,146,147 and 149-152.

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## **DETAILED ACTION**

### ***Status of the Claims***

1. Claims 49, 56-71, 73-80, 83-84, 86-93, 96-102, 122-123, 127-131, 133-134, 137-143 and 146-154 are pending.

Applicants' amendment filed October 2, 2009 is acknowledged. Applicants' response has been fully considered. Claims 49, 56-62, 71, 73-80, 83-84, 86, 88-89, 98, 122 and 148 have been amended, claims 82 and 94 have been cancelled, and new claims 151-154 have been added. Claims 70, 79, 80 and 84 are non-elected inventions, however, since generic claim 56 appears allowable, these claims are included for examination. Therefore, claims 49, 56-71, 73-80, 83-84, 86-93, 96-102, 122-123, 127-131, 133-134, 137-143 and 146-154 are examined.

### **Withdrawn Claim Objections**

2. The previous objection to claims 58-66, 68, 69, 71, 77-78, 127-128 and 148 is withdrawn in view of applicants' amendment to the claim in the amendment filed October 2, 2009.

### **Withdrawn Claim Rejections - 35 USC § 102**

3. The previous rejection of claims 56, 67, 73-76 and 86-87, under 35 U.S.C. 102(b) as being anticipated by Nagai *et al.* (Nature Biotechnology 18, 313-316, March 2000), is withdrawn in view of applicants' amendment to the claims, and applicants' response at page 192 in the amendment filed October 2, 2009.

### ***New Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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3. Claims 49, 60-66, 80, 88, 89, 93, 123, 127-131, 134, 137-141, 148, 153 and 154 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claims 49, 89, 123, 134 and 137-139 are indefinite because of the use of the term “HN-LINKER-C(=O)”. The term cited renders the claim indefinite, it is not clear how the linker is attached in the substrate since the linker has already contained both NH and CO groups and the structure of the substrate again shows both NH and CO groups in addition to the linker. Claims 123, 134 and 137-139 are included in the rejection because they are dependent on a rejected claim and do not correct the deficiency of the claim from which they depend.

5. Claims 60-66, 127, 128, 148 and 153-154 are indefinite because of the use of the term “A substrate for a protein kinase” or “the substrate cannot be phosphorylated by a protein kinase”. The term cited renders the claim indefinite, it is not clear how the term “the substrate” is recited in the claim because the peptide has a photolabile side chain attached to the serine, the threonine or the tyrosine on the terminal end of the peptide, and the blocked peptide cannot be phosphorylated, so the blocked peptide is not substrate, but a precursor. Claims 60-66, 127, 128 and 153-154 are included in the rejection because they are dependent on a rejected claim and do not correct the deficiency of the claim from which they depend.

6. Claims 80 and 93 contain the trademark/trade name such as Alex Fluor®. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular

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material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify/describe a fluorophore and, accordingly, the identification/description is indefinite.

7. Claim 129 recites the limitation "a metal ion chelator" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim. Claims 130-131 are included in the rejection because they are dependent on a rejected claim and do not correct the deficiency of the claim from which they depend.

8. Claims 88 and 140-141 are indefinite because of the use of the term "comprising SEQ ID NO:3". The term cited renders the claim indefinite, it is not clear how compounds 72-75 which do not have Ser-Phe-Arg-Arg-Arg-Arg sequence would contain SEQ ID NO:3. Claim 88 is also indefinite because of the recitation of the functional group "O-O-N" in compound 86 and "HO-O-NH" in compounds 101, 105, 106, 109, 124, 128, 129, 132, 147, 151, 152, 155, 174, 175, 178, 197, 198, 201, 216, 220, 221, 224, 239, 243, 244, 247, 262, 266, 267, 270, 285, 290, 293, 308, 312, 313, 316, 331, 336, 339, 354, 358, 359, 362, 377, 381, 382, 385, 400, 404, 405. It is not clear what structure the function group of "O-O-N" or "HO-O-NH" has. Claim 88 is also indefinite because of the recitation of the functional group "CN" in compounds 24 and 163-185, where the CN is attached to the ring via nitrogen, while in compound 26, the CN group is attached to the ring via carbon, it is not clear which structure is correct. Claims 140-141 are included in the rejection because they are dependent on a rejected claim and do not correct the deficiency of the claim from which they depend.

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***Claim Objections***

9. Claim 57 is objected to because the claims are dependent from a rejected claim.

***Conclusion***

10. Claims 49, 60-66, 80, 88, 89, 93, 123, 127-131, 134, 137-141, 148, 153 and 154 are rejected; and claim 57 is objected to. It appears claims 56, 58, 59, 67-71, 73-79, 83-84, 86-87, 90-92, 96-102, 122, 133, 142-143, 146-147 and 149-152 are free of art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chih-Min Kam whose telephone number is (571) 272-0948. The examiner can normally be reached on 8.00-4:30, Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Manjunath Rao can be reached at 571-272-0939. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Chih-Min Kam/

Primary Examiner, Art Unit 1656

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January 11, 2010